

Listing of the Claims:

The following is a complete listing of all the claims in the application, with an indication of the status of each:

1 1 (Currently Amended). A real time recording/reproducing system for
2 converting an analog image signal in an analog-to-digital converter (ADC)
3 to digital data, recording the digital data in a recorder, reading out the
4 digital data recorded in the recorder and converting the read-out digital
5 data in a digital-to-analog converter (DAC) to analog data to be outputted,
6 the real time recording/reproducing system comprising:
7 a first frame memory for storing the output of the ADC;
8 a compression processing module for compressing the output of the
9 first frame memory;
10 a decompression processing module for decompressing the digital
11 data read out from the recorder;
12 a second frame memory for storing the output of the decompression
13 processing module and outputting the stored data to the DAC; and
14 a frame rate controller for controlling the compression processing
15 module to hold a constant intrinsic frame rate by executing frame
16 interpolating processing.

1 Claim 2 (Currently Amended). A real time recording/reproducing system
2 for converting an analog image signal in an analog-to-digital converter
3 (ADC) to digital data, recording the digital data in a recorder, reading out
4 the digital data recorded in the recorder and converting the read-out digital
5 data in a digital-to-analog converter (DAC) to analog data to be outputted,
6 the real time recording/reproducing system comprising:
7 a first frame memory for storing the output of the ADC;
8 a compression processing module for compressing the output of the
9 first frame memory;
10 a decompression processing module for decompressing the digital
11 data read out from the recorder;

12 a second frame memory for storing the output of the decompression
13 processing module and outputting the stored data to the DAC; and
14 a frame rate controller for controlling the frame rate of the
15 compression processing module to be constant by executing a frame
16 interpolating processing, and wherein the compression processing module
17 has a frame thinning-out function of reducing an actual frame rate while
18 holding a constant intrinsic frame rate.

1 Claim 3 (Currently Amended). A real time recording/reproducing system
2 for converting an analog image signal in an analog-to-digital converter
3 (ADC) to digital data, recording the digital data in a recorder, reading out
4 the digital data recorded in the recorder and converting the read-out digital
5 data in a digital-to-analog converter (DAC) to analog data to be outputted,
6 the real time recording/reproducing system comprising:
7 a first frame memory for storing the output of the ADC;
8 a compression processing module for compressing the output of the
9 first frame memory;
10 a decompression processing module for decompressing the digital
11 data read out from the recorder and executing a frame skipping processing
12 when it becomes unable to execute full frame real time decompression
13 processing;
14 a second frame memory for storing the output of the decompression
15 processing module and outputting the stored data to the DAC; and
16 a frame rate controller for controlling the compression processing
17 module to be constant by executing frame interpolating processing,
18 wherein the decompression processing module has a function of thinning
19 out frames for continuing reproduction synchronous to voice.

1 Claim 4 (Currently Amended). The real time recording/reproducing system
2 according to claim 1, wherein the frame thinning-out in the decompression
3 processing module and the frame skipping in the decompression
4 processing module are performed preferentially from frame-interpolation

5 frames to generate digital compressed data involving much motion.

1 Claim 5 (Currently Amended). The real time recording/reproducing system
2 according to claim 1, wherein the compression processing ~~modules~~ module
3 adds data bit stream data including a picture header representing ~~the~~ a start
4 of a frame compression code, a user data representing a thinned-out frame
5 and a reference frame code representing the same frame as a reference
6 frame.

1 Claim 6 (Currently Amended). A real time recording/reproducing ~~system~~
2 method for recording a digital data in a recorder obtained by converting an
3 analog image signal, and reproducing ~~the recorded the~~ digital data ~~through~~
4 ~~in the~~ an analog data ~~fromat~~ format comprising steps of:
5 storing the digital data in a first frame memory;
6 compressing the output of the first frame memory;
7 recording a compressed output of the first frame memory as digital
8 data in the recorder;
9 decompressing the digital data read out from the recorder;
10 storing the decompressed data in a second memory;
11 controlling the frame rate of the compressed ~~data~~ output of the first
12 frame memory to be constant by executing a frame interpolating
13 processing; and
14 executing a frame skipping processing when ~~it becomes unable to~~
15 ~~execute~~ full frame real time decompression processing cannot be executed.

1 Claim 7 (Original). The real time recording/reproducing system according
2 to claim 6, wherein the frame thinning-out and the frame skipping
3 operations are performed preferentially from frame-interpolation frames to
4 generate digital compressed data involving much motion.

1 Claim 8 (Original). The real time recording/reproducing system according
2 to claim 6, wherein in the compression processing operation data bit

3 stream data including a picture header representing the start of a frame
4 compression code, a user data representing a thinned-out frame and a
5 reference frame code representing the same frame are added as a reference
6 frame.

1 Claim 9 (New). The real time recording/reproducing system according to
2 claim 1, wherein the compression processing module and the
3 decompression processing modules are constituted by central processing
4 unit (CPU) software processing parts.

1 Claim 10 (New). The real time recording/reproducing system according to
2 claim 9, wherein the ADC is a video capture card and the DAC is a graphic
3 accelerator card.

1 Claim 11 (New). The real time recording/reproducing system according to
2 claim 10, wherein the first and second frame memories are main memory
3 and video memory, respectively.

1 Claim 12 (New). The real time recording/reproducing system according to
2 claim 11, wherein the recorder is constituted by a hard disc drive.